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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,122	12/29/2000	John P. Proctor	M-7194-2P US	1908

24251 7590 09/16/2002

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EXAMINER

DUNWOODY, AARON M

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 09/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/753,122

Applicant(s)

PROCTOR ET AL.

Examiner

Aaron M Dunwoody

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 28 June 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 4-8, 10-14 and 16-22 are rejected under 35 U.S.C. 102(e) as being anticipated by US patent 6170883, Mattsson et al.

In regards to claim 1, Mattsson et al discloses a duct joining system, comprising a first duct (11) having a male end, the first duct having a first bead (12) on the male end; a flexible seal and locking mechanism (16) retained on the male end of the first duct between the first bead and an end of the first duct; and a second duct (21) having a female end having a first cross sectional area and a second bead (23) of a second cross sectional area that is greater than the first cross sectional area, the second duct may be joined to the first duct by sliding the female end over the male end, the flexible seal and locking mechanism being compressed within the first cross sectional area, the

flexible seal and locking mechanism expanding into the second bead to form both a seal and a mechanical lock that provides resistance to the separation of the first duct and the second duct greater than the resistance to the joining of the first duct and the second duct.

In regards to claim 2, Mattsson et al discloses the flexible seal and locking mechanism being a flexible gasket held on the male end at an angle (zero degrees) relative to normal and away from the end of the first duct.

In regards to claim 4, Mattsson et al discloses the first bead acting as a stop bead to ensure the second duct is properly positioned with the first duct when the first duct and the second duct are joined.

In regards to claim 5, Mattsson et al discloses a third bead (11a) on the first duct located between the flexible seal and locking mechanism and the end of the first duct, wherein the third bead has a diameter that is less than the diameter of the first bead.

In regards to claim 6, Mattsson et al discloses one of the first duct and the second duct being a fitting.

In regards to claim 7, Mattsson et al discloses a duct joining system that simultaneously seals and locks the joint in place consisting of a first duct having a female end, the first duct having a first bead on the female end; a flexible seal and locking mechanism retained within the female end of the first duct between the first bead and an end of the first duct; and a second duct having a male end having a first cross sectional area and a second bead of a second cross sectional area that is less than the first cross sectional area, the second duct may be joined to the first duct by

sliding the female end over the male end, the flexible seal and locking mechanism being compressed by the first cross sectional area, the flexible seal and locking mechanism expanding into the second bead to form both a seal and a mechanical lock that provides resistance to the separation of the first duct and the second duct greater than the resistance to the joining of the first duct and the second duct.

In regards to claim 8, Mattsson et al discloses the flexible seal and locking mechanism being a flexible gasket held on the female end at an angle relative to normal and away from the end of the first duct.

In regards to claim 10, Mattsson et al discloses the first bead acting as a stop bead to ensure the second duct is properly positioned with the first duct when the first duct and the second duct are joined.

In regards to claim 11, Mattsson et al discloses third bead on the first duct located between the flexible seal and locking mechanism and the end of the first duct, wherein the third bead has a diameter that is greater than the diameter of the first bead.

In regards to claim 12, Mattsson et al discloses one of the first duct and the second duct being a fitting.

In regards to claim 13, Mattsson et al discloses a duct joining system that seals and locks the joint in place consisting of a first duct having a male end, the first duct having a first bead on the male end; a flexible seal and locking mechanism retained on the male end of the first duct between the first bead and an end of the first duct; and a flexible duct that may be joined to the first duct by sliding the flexible duct over the flexible seal and locking mechanism, the flexible seal and locking mechanism

expanding within the flexible duct to form both a seal and a mechanical lock that provides resistance to the separation of the first duct and the flexible duct greater than the resistance to the joining of the first duct and the flexible duct.

In regards to claim 14, Mattsson et al discloses the flexible seal and locking mechanism being a flexible gasket held on the male end at an angle relative to normal and away from the end of the first duct.

In regards to claim 16, Mattsson et al discloses a second bead on the first duct located between the flexible seal and locking mechanism and the end of the first duct, wherein the second bead has a diameter that is less than the diameter of the first bead.

In regards to claim 17, Mattsson et al discloses the first duct being a fitting.

In regards to claim 18, Mattsson et al discloses an apparatus comprising a first duct; a second duct, wherein a portion of the first duct is inserted into a portion of the second duct; and means for providing a seal and a mechanical connection between the first duct and the second duct when the portion of the first duct is inserted into a portion of the second duct.

In regards to claim 19, Mattsson et al discloses the second duct having a raised bead into which the means is seated to form the seal and the mechanical connection when the portion of the first duct is inserted into the portion of the second duct.

In regards to claim 20, Mattsson et al discloses the first duct having a depressed bead (17) into which the means is seated to form the seal and the mechanical connection when the portion of the first duct is inserted into the portion of the second duct.

In regards to claim 21, Mattsson et al discloses the means being a flexible gasket.

In regards to claim 22, Mattsson et al discloses the first duct having a first bead, the flexible gasket being mounted closer to the front of the first duct than the first bead, the flexible gasket having an angle relative to normal of the first duct.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mattsson et al.

In regards to claims 3, 9 and 15, Mattsson et al discloses the invention except for the resistance to the separation of the first duct and the second duct being at least three times greater than the resistance to the joining of the first duct and the second duct. It would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the resistance to the separation of the first duct and the second duct to at least three times greater than the resistance to the joining of the first duct and the second duct, since the optimization of proportions in a prior art device is a design consideration within the skill of the art. In re Reese, 290 F.2d 839, 129 USPQ 402 (CCPA 1961).

Response to Arguments

Applicant's arguments filed 6/28/02 have been fully considered but they are not persuasive. The applicant argues:

Nowhere does *Mattsson* teach or suggest 'a flexible seal and locking mechanism retained on said male end of said first duct...said flexible seal and locking mechanism expanding into said second bead to form both a seal and a mechanical locking that provides resistance to the separation of said first duct and said second duct...

The examiner disagrees. *Mattsson* et al discloses, in figure 6, a flexible seal and locking mechanism (16) retained on said male end of said first duct said flexible seal and locking mechanism expanding into said second bead (23) to form both a seal and a mechanical locking that provides resistance to the separation of said first duct and said second duct. The flexible seal inherently provides resistance to the separation of said first duct and said second duct to lock the first and second ducts together. This is accomplished when 16 is forced to bend in the opposite direction illustrated in *Mattsson's* figure 6.

Further, where there is reason to believe that a functional limitation asserted to be critical to establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, Applicant may be required to prove that the subject matter shown in the prior art does not possess the characteristic relied upon. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990); In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138 (Fed. Cir. 1986); In re Hallman, 655 F.2d 212, 215, 210 USPQ 609, 611 (CCPA 1981); In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596-97

(CCPA 1980); In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977);
In re Ludtke, 441 F.2d 660, 664, 169 USPQ 563, 566 (CCPA 1971); In re Swinehart,
439 F.2d 210, 213, 169 USPQ 226, 229 (CCPA 1971).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Dunwoody whose telephone number is (703) 306-3436. The examiner can normally be reached on Monday - Friday between 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

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872-9302 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

.amd
September 9, 2002



Lynne H. Browne
Supervisory Patent Examiner
Technology Center 3670